AMENDMENTS TO THE CLAIMS

Claims 1-43 (Canceled)

Claim 44 (Currently Amended)   A <u>method</u> ~~semiconductor manufacturing system~~ for producing a substrate to be treated <u>using</u> ~~including~~ a controller for controlling an operation of the semiconductor manufacturing system by carrying out a control program<u>,</u> ~~according to the following events~~ <u>comprising</u>:

a standby event ~~for~~ charging a substrate in a boat;

a boat-up event ~~for~~ loading the boat in a reactor by raising an elevator;

a ramping-up event ~~for~~ gradually raising a temperature;

a process event ~~for~~ forming a film on <u>the</u> ~~a~~ substrate;

a ramping-down event ~~for~~ gradually decreasing <u>the</u> ~~a~~ temperature;

a boat-down event ~~for~~ drawing the boat from the reactor by lowering the elevator; and

a standby event ~~for~~ discharging the substrate from the boat<u>;</u> ~~;~~

wherein the controller ~~includes functions for~~ <u>further performs the functions of</u>:

determining a timing at which the control program can be changed;

storing a new control program in a memory, in accordance with a result of said determining, so as to be carried out with a processor, wherein <u>said</u> ~~the~~ process event for forming a film on the substrate is not determined as the timing for changing the control program; and

holding <u>prior</u> data used to carry out a prior control program so as to carry out the new control program stored in the memory with the processor by employing <u>the</u> prior data.

Claim 45 (Currently Amended)   The <u>method</u> ~~semiconductor manufacturing system~~ according to Claim 44, wherein the controller ~~includes a function to~~ temporarily <u>holds</u> ~~hold~~ the control program so as to store the control program held in the buffer in the memory.

Claim 46 (Currently Amended) The method ~~semiconductor manufacturing system~~ according to Claim 44, wherein the control program of the controller is changed while a temperature is in a constant state <u>the</u> same as a state of which the reaction chamber is in a standby state.

Claim 47 (Currently Amended) The method ~~semiconductor manufacturing system~~ according to Claim 44, wherein the standby event ~~for~~ charging the substrate to the boat is determined as the timing for changing the control program.

Claim 48 (Currently Amended) The method ~~semiconductor manufacturing system~~ according to Claim 44, wherein the boat-up event ~~for~~ loading the boat in a reactor by raising an elevator is determined as the timing for changing the control program.

Claim 49 (Currently Amended) The method ~~semiconductor manufacturing system~~ according to Claim 44, wherein <u>the</u> ~~a~~ boat-down event ~~for~~ drawing the boat from the reactor by lowering the elevator is determined as the timing for changing the control program.

Claim 50 (Currently Amended) The method ~~semiconductor manufacturing system~~ according to Claim 44, wherein <u>the</u> ~~a~~ standby event for discharging the substrate from the boat is determined as the timing for changing the control program.

Claim 51 (Currently Amended) A method ~~semiconductor manufacturing system~~ for producing a substrate to be treated <u>using</u> ~~comprising~~ a controller for controlling an operation of the semiconductor manufacturing system by carrying out a control program, ~~the controller including functions for~~ <u>and for changing the control program including</u>:

holding <u>prior</u> data used for carrying out a prior control program;

temporarily holding a new control program;

receiving <u>an</u> instruction as to an input of a <u>control program</u> change from a user; ~~and~~

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storing the new control program in a memory, so that it can be carried out by a processor, according to the instruction;~

changing wherein the control program is changed at a timing when the controller to which the control program is supplied is does not carrying carry out a control process and of the operation of the semiconductor manufacturing system;

the new control program stored in the memory with the process by employing the prior data.

Claim 52 (Currently Amended)   A method semiconductor manufacturing system according to Claim 51, wherein the   control program is changed at a timing when the semiconductor manufacturing system itself is standing by or has suspended operation.

Claim 53 (Currently Amended)   A method semiconductor manufacturing system according to Claim 51, wherein the controller is a temperature controller and the a control program of the temperature controller is changed at a timing when the temperature in the reaction chamber is constant and the same as a standby state.

Claim 54 (Currently Amended)   A method semiconductor manufacturing system according to Claim 51, wherein the controller is a mechanical controller and the control program of the mechanical controller and the control program of the mechanical controller is changed at a timing when a robot arm or an elevator is stopped.

Claim 55 (Currently Amended)   A method semiconductor manufacturing system according to Claim 51, wherein the controller is a gas controller and the control program is changed at a timing when no gas is supplied to a the reaction chamber.

Claim 56 (New)   A semiconductor manufacturing system for producing a substrate to be treated, said system comprising a controller for controlling operation of the semiconductor

manufacturing system by carrying out a control program that is stored in memory, said control program being operable to carry out the following events:

a standby event charging a substrate in a boat;

a boat-up event loading the boat in a reactor by raising an elevator;

a ramping-up event gradually raising a temperature;

a process event forming a film on the substrate;

a ramping-down event gradually decreasing the temperature;

a boat-down event drawing the boat from the reactor by lowering the elevator; and

a standby event discharging the substrate from the boat;

wherein said controller is configured to carry out the functions of:

determining a timing at which the control program can be changed;

storing a new control program in a memory, in accordance with a result of said determining, so as to be carried out with a processor, wherein said process event for forming a film on the substrate is not determined as the timing for changing the control program; and

holding prior data used to carry out a prior control program so as to carry out the new control program stored in the memory with the processor by employing the prior data.

Claim 57 (New)   The semiconductor manufacturing system according to Claim 56, wherein the controller includes a function to temporarily hold the control program so as to store the control program held in the buffer in the memory.

Claim 58 (New)   The semiconductor manufacturing system according to Claim 56, wherein the control program of the controller is changed while a temperature is in a constant state same as a state of which the reaction chamber is in a standby state.

Claim 59 (New)   The semiconductor manufacturing system according to Claim 56, wherein the standby event for charging the substrate to the boat is determined as the timing for changing the control program.

Claim 60 (New)   The semiconductor manufacturing system according to Claim 56, wherein the boat-up event for loading the boat in a reactor by raising an elevator is determined as the timing for changing the control program.

Claim 61 (New)   The semiconductor manufacturing system according to Claim 56, wherein a boat-down event for drawing the boat from the reactor by lowering the elevator is determined as the timing for changing the control program.

Claim 62 (New)   The semiconductor manufacturing system according to Claim 56, wherein a standby event for discharging the substrate from the boat is determined as the timing for changing the control program.